

W.M. Norr 1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



Patent Application

Applicant(s): W.M. Norr

Case: 1

Serial No.: 09/364,432

Filing Date: July 30, 1999

Group: 2172

Examiner: Monplaisir G. Hamilton

I hereby certify that this paper is being deposited on this date with the U.S. Postal Service as first class mail addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Signature: Laura M. - Hamilton Date: August 10, 2004

Title: Information Delivery in a Multi-Stream Digital Broadcasting System

TRANSMITTAL OF APPEAL BRIEF

Mail Stop Appeal Brief - Patents

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

Submitted herewith are the following documents relating to the above-identified patent application:

- (1) Appeal Brief in triplicate (original and two copies); and
- (2) Copy of Notice of Appeal, filed on June 8, 2004, with copy of stamped return postcard indicating receipt of Notice by PTO on June 10, 2004.

There is an additional fee of \$330 due in conjunction with this submission under 37 CFR §1.17(c). Please charge **Ryan, Mason & Lewis, LLP Account No. 50-0762** the amount of \$330, to cover this fee. In the event of non-payment or improper payment of a required fee, the Commissioner is authorized to charge or to credit **Deposit Account No. 50-0762** as required to correct the error. A duplicate copy of this letter and two copies of the Appeal Brief are enclosed.

Respectfully submitted,

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Date: August 10, 2004



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Signature: Jessica N. Hamilton Date: August 10, 2004

Title: Information Delivery in a Multi-Stream Digital Broadcasting System

APPEAL BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicant hereby appeals the final rejection dated March 8, 2004 of claims 1-38 of the above-identified application.

REAL PARTY IN INTEREST

The present application is assigned to Lucent Technologies Inc., as evidenced by an assignment recorded July 30, 1999 in the U.S. Patent and Trademark Office at Reel 010150, Frame 0122. The assignee Lucent Technologies Inc. is the real party in interest.

RELATED APPEALS AND INTERFERENCES

There are no known related appeals or interferences.

08/16/2004 WASFAWI 00000042 500762 09364432
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STATUS OF CLAIMS

The present application was filed on July 30, 1999 with claims 1-38. Claims 1-38 remain pending in the application. Claims 1, 15, 29, 31, 33-35 and 37 are the independent claims.

Each of claims 1-38 stands rejected under 35 U.S.C. §103(a). Claims 1-38 are appealed.

STATUS OF AMENDMENTS

There have been no amendments filed subsequent to the final rejection.

SUMMARY OF INVENTION

The present invention is directed to arrangements for delivering information using multiple bitstreams of a digital communication system. The multiple bitstreams are transmitted in subbands of one or more digital sidebands of a carrier signal in the system.

In an illustrative embodiment shown in FIG. 1 of the drawings, the carrier signal is an analog host FM signal 100 of an FM in-band on-channel (IBOC) digital audio broadcasting (DAB) system. The digital sidebands of the host FM signal 100 comprise a lower digital sideband 102 and an upper digital sideband 104. Each of the digital sidebands 102, 104 includes a pair of subbands, denoted A and B. The multiple bitstreams in this embodiment comprise a total of four different bitstreams, namely, bitstreams 105-1 and 105-2 associated with respective subbands B and A of the lower sideband 102, and bitstreams 105-3 and 105-4 associated with respective subbands B and A of the upper sideband 104. See the specification at, for example, page 4, lines 2-28.

In one aspect of the invention, at least a portion of the information is delivered to a receiver in an at least partially-encrypted format using the multiple bitstreams, such that access to the information is provided at a first quality level. Upon decryption of the at least partially-encrypted format, access to the information is provided at another quality level.

In another aspect of the invention, at least a portion of the information is delivered to a receiver, using at least first and second bitstreams of the multiple bitstreams, wherein the first bitstream is encrypted and the second bitstream is unencrypted, such that access to the information is provided at a first quality level. Upon decryption of the first bitstream, access to the information is provided at another quality level.

With reference again to the illustrative embodiment, a transmitter 200 as shown in FIG. 3 encrypts certain of the multiple bitstreams, while leaving others of the multiple bitstreams unencrypted. The encryption is applied to an output of a perceptual audio coder 215 by a multi-stream encryption device 210. The specification at page 7, lines 7-13, describes the process as follows:

In a typical arrangement, at least about one-half of the multiple bitstreams generated by the PAC encoder 215 will be encrypted. For example, if four streams are generated, e.g., as illustrated in FIG. 1, at least two of the four will be encrypted; if two streams are generated, at least one will be encrypted.

Thus, a user can receive an audio signal at a certain quality level by using only the unencrypted streams to reconstruct the audio signal. Alternatively, the user can purchase a decryption key which permits use of both the encrypted streams and the unencrypted streams to reproduce the audio signal, resulting in a higher audio quality. An example of such an arrangement is described as follows at page 5, lines 16-22, of the specification:

In the FIG. 1 system, all four of the bitstreams 105-1, 105-2, 105-3 and 105-4 are generally required in order to reproduce CD-quality audio. In other words, all four of these streams must be received and decoded in order to reconstruct a transmitted audio signal with CD-quality fidelity, i.e., a bandwidth of about 19 kHz and a dynamic range of about 96 dB. Any two of the four bitstreams can be used to reproduce FM-quality audio, which has a significantly lower bandwidth and dynamic range than CD-quality audio, i.e., a bandwidth of about 13 kHz and a dynamic range of about 65 to 70 dB.

The present invention provides a number of significant advantages over conventional techniques. For example, the specification at page 6, lines 12-21, states as follows regarding one such advantage of the illustrative embodiment:

Advantageously, such an arrangement allows the user to purchase CD-quality audio information that has been previously supplied to them over broadcast airwaves, without requiring the user to download the CD-quality audio from the Internet.

The invention also facilitates the provision of a variety of received quality levels in an FM IBOC DAB system or other digital communication system in which multiple bitstreams are transmitted in corresponding subbands of digital sidebands of a host carrier signal.

ISSUES PRESENTED FOR REVIEW

1. Whether claims 1-3, 10-12, 14-17, 24-26, 28-35 and 37 are unpatentable under 35 U.S.C. §103(a) over U.S. Patent No. 6,026,164 (hereinafter “Sakamoto”) in view of U.S. Patent No. 5,267,021 (hereinafter “Ramchandran”).
2. Whether claims 4-9, 13, 18-23, 27, 36 and 38 are unpatentable under §103(a) over Sakamoto and Ramchandran in view of U.S. Patent No. 5,740,246 (hereinafter “Saito”).

GROUPING OF CLAIMS

With regard to Issue 1, claims 1-3, 10-12, 15-17, 24-26, 29-32, 35 and 37 stand or fall together, claims 14 and 28 stand or fall together, and claims 33 and 34 stand or fall together.

With regard to Issue 2, claims 4, 6, 7, 13, 18, 20, 21 and 27 stand or fall together, claims 5 and 19 stand or fall together, claims 8 and 22 stand or fall together, claims 9 and 23 stand or fall together, and claims 36 and 38 stand or fall together.

ARGUMENT

Issue 1

Applicant initially notes that a proper *prima facie* case of obviousness requires that the cited references when combined must “teach or suggest all the claim limitations,” and that there be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the references or to modify the reference teachings. See Manual of Patent Examining Procedure (MPEP), Eighth Edition, August 2001, §706.02(j).

Applicant submits that the Examiner has failed to establish a proper *prima facie* case of obviousness in the present §103(a) rejection, in that the Sakamoto and Ramchandran references, even if assumed to be combinable, fail to teach or suggest all the limitations of each of independent claims 1, 15, 29, 31, 33-35 and 37, and in that no cogent motivation has been identified for combining the references or for modifying the reference teachings to reach the claimed invention. Furthermore, even if it is assumed that a *prima facie* case has been established, there are teachings in one or more of the references that controvert the obviousness arguments of the Examiner.

The present invention as set forth in independent claims 1, 15, 29, 31, 33-35 and 37 is generally directed to arrangements in which information is delivered in a partially-encrypted format using multiple bitstreams of a digital communication system. Each of these claims specifies that the multiple bitstreams are transmitted in subbands of one or more digital sidebands of a carrier signal in the system.

For example, with reference to claim 1, at least a portion of the information is delivered to a receiver in an at least partially-encrypted format using the multiple bitstreams transmitted in subbands of one or more digital sidebands of a carrier of a digital communication system, such that access to the information is provided at a first quality level. Upon decryption of the at least partially-encrypted format, access to the information is provided at another quality level.

This exemplary partially-encrypted format advantageously allows access to the information to be provided, for instance, at a first quality level without decrypting the second bitstream. If the second bitstream is decrypted, access to the information may be provided at a second quality level higher than the first. The invention facilitates the provision of such quality levels in an FM IBOC DAB system or other digital communication system in which multiple bitstreams are transmitted in corresponding subbands of digital sidebands of a host carrier signal.

The Examiner acknowledges that Sakamoto fails to meet the limitations of claim 1, but argues that the combined teachings of Sakamoto and Ramchandran meet the limitations in question. Applicant respectfully disagrees. The collective teachings of these references simply fail to teach or suggest the claimed arrangements. For example, the Examiner argues that the claim limitations relating to multiple bitstreams being transmitted in subbands of one or more digital sidebands of a carrier signal in the system are shown in the teachings in FIG. 14 and column 15, lines 20-40, of

Ramchandran. However, in the relied-upon portion of Ramchandran, subchannel 1 and subchannel 2 are not subbands of one or more digital sidebands of a carrier signal as claimed. Instead, subchannel 1 and subchannel 2 each characterize a designated portion of the frequency spectrum corresponding to an output of a particular QAM transmitter, as shown in FIG. 14. Even if one were to assume, for purposes of argument only, that subchannel 1 and subchannel 2 constitute a pair of digital sidebands of the “interfering carrier” shown in FIG. 14, there is no teaching or suggestion whatsoever in Ramchandran regarding multiple bitstreams being transmitted in subbands of such digital sidebands, as would be required by the claim limitations at issue. There is apparently no discussion at all in Ramchandran regarding subbands of the subchannel 1 and subchannel 2 portions of FIG. 14.

In the Advisory Action dated August 6, 2004, the Examiner again relies on FIG. 14 of Ramchandran, this time supplemented by the teachings in column 7, lines 4-15 and 25-45. However, the relied-upon portions of Ramchandran fail to teach or suggest the claimed multiple bitstreams transmitted in subbands of one or more digital sidebands of a carrier signal in the system. As Applicant described above, an example of the claimed arrangement is shown in FIG. 1 of the drawings. In this example, the digital sidebands of the host FM signal 100 comprise a lower digital sideband 102 and an upper digital sideband 104. Each of the digital sidebands 102, 104 includes a pair of subbands, denoted A and B. The multiple bitstreams in this embodiment comprise a total of four different bitstreams, namely, bitstreams 105-1 and 105-2 associated with respective subbands B and A of the lower sideband 102, and bitstreams 105-3 and 105-4 associated with respective subbands B and A of the upper sideband 104. Thus, the claimed subbands are particular subportions of a given digital sideband of a carrier signal. There is no such arrangement shown in the Ramchandran reference, or in the combined teachings of Sakamoto and Ramchandran.

The proposed combination of Sakamoto and Ramchandran thus fails to teach or suggest all of the limitations of independent claim 1.

The collective teachings of the cited references are similarly deficient with regard to the other independent claims.

With regard to motivation, the proposed combination of Sakamoto and Ramchandran appears to be based on a piecemeal reconstruction of the claimed invention, with the benefit of hindsight, rather than on any objective evidence in the references themselves.

More specifically, the Examiner in the final Office Action states as follows regarding motivation to combine Sakamoto and Ramchandran, with emphasis supplied:

At the time the invention was made, it would have been obvious . . . to modify the teachings of Sakamoto such that multiple bitstreams are transmitted in subbands of one or more digital sidebands of a carrier signal in the system. One of ordinary skill in the art would have been motivated to do this because it would provide a system that is able to broadcast signals representing the same data at different resolutions (Sakamoto: col. 4, lines 45-60).

The Federal Circuit has stated that when patentability turns on the question of obviousness, the obviousness determination “must be based on objective evidence of record” and that “this precedent has been reinforced in myriad decisions, and cannot be dispensed with.” In re Sang-Su Lee, 277 F.3d 1338, 1343 (Fed. Cir. 2002). Moreover, the Federal Circuit has stated that “conclusory statements” by an examiner fail to adequately address the factual question of motivation, which is material to patentability and cannot be resolved “on subjective belief and unknown authority.” Id. at 1343-1344. There has been no showing in the present §103(a) rejection of objective evidence of record that would motivate one skilled in the art to combine Sakamoto and Ramchandran, or to modify their teachings to reach the particular limitations in question. The statement of obviousness given by the Examiner in the final Office Action is precisely the type of subjective, conclusory statement that the Federal Circuit has indicated provides insufficient support for an obviousness rejection.

The portion of the Sakamoto reference relied upon by the Examiner in support of his motivation statement is column 4, lines 45-60, which provides as follows:

By further providing storage means on the reception apparatus side, the received synthesized data can be recorded or edited. Use of the storage means enables data exchange with only the privileged viewers.

A digital television broadcasting system of the present invention is a system that converts digital television signals into a plurality of encoded signals differing in resolution, layers these signals, and broadcasts them, and is characterized by comprising: scrambling means that is provided on the transmission side and performs a scrambling process on only the high layer ones of the plurality of encoded signals; and descrambling means that is provided on the reception side and performs a descrambling process on the encoded signals subjected to the high layer scrambling process, wherein for the high layer encoded signals, the output of the descrambling means undergoes a decoding process, whereas for the low layer encoded signals, the decoding process is performed without the descrambling process.

It is difficult to see how this relied-upon portion of Sakamoto provides any objective evidence whatsoever of motivation to combine Sakamoto with Ramchandran. Instead, it is more properly viewed as a teaching away from the proposed combination, since it teaches to utilize a scrambling and descrambling approach to differentiate high layer encoded signals from low layer encoded signals. Such an approach appears to be unworkable in the Ramchandran system, thereby teaching away from the proposed combination.

Thus, even if it is assumed that a proper *prima facie* case has been established, there are particular teachings in one or more of the references which controvert the obviousness argument put forth by the Examiner. As noted above, the column 4, lines 45-60, portion of Sakamoto relied upon by the Examiner constitutes such a teaching away from the proposed combination in that the scrambling and descrambling described therein is not readily combinable, or even workable, in the Ramchandran system.

Independent claims 1, 15, 29, 31, 33-35 and 37 are therefore believed to be allowable over the proposed combination of Sakamoto and Ramchandran.

Dependent claims 2, 3, 10-12, 16, 17, 24-26, 30 and 32 are believed allowable for at least the reasons identified above with regard to their respective independent claims.

With regard to independent claims 33 and 34, these claims further specify that information is delivered to a receiver using first and second bitstreams of a digital communication system, with the first bitstream being encrypted and the second bitstream being unencrypted, and with the first and second bitstreams being transmitted in subbands of one or more digital sidebands of a carrier signal in the system. The Examiner relies on an arrangement such as that shown in FIG. 1 of Sakamoto. However, it is apparent from FIG. 1 of Sakamoto and the associated description at column 5, lines 51-65, that the low-quality layer data S2 and encrypted high-quality layer data S4 are combined via a combining unit 123 into a single set of data S5 for transmission. The data S2 and S4 therefore cannot be construed as first and second bitstreams that are transmitted in subbands of one or more digital sidebands of a carrier signal. In fact, the relied-upon portions of Sakamoto, by teaching combination of the layer data S2 and S4 into a single set of data S5 for transmission directly teaches away from the claimed invention.

With regard to dependent claims 14 and 28, these claims specify that a storage device accessible to a receiver is adaptable for insertion into (i) a corresponding receptacle of the receiver, and (ii) a corresponding receptacle of an information processing device which establishes a network connection with a server for obtaining a decryption key for decrypting the information in the at least partially-encrypted format. The Examiner relies on the teachings in column 6, lines 30-45, of Sakamoto. These relied-upon teachings mention examples of storage media, such as magnetic tape or floppy disks, but fail to meet the particular limitations (i) and (ii) of claims 14 and 28. The collective teachings of Sakamoto and Ramchandran thus fail to disclose or suggest each and every limitation of the claims at issue.

Issue 2

Applicant respectfully submits that the Saito reference fails to supplement the above-described fundamental deficiency of the proposed combination of Sakamoto and Ramchandran as applied to the independent claims.

Dependent claims 4-9, 13, 18-23, 27, 36 and 38 are therefore believed allowable for at least the reasons identified above with regard to their respective independent claims. Certain of these

claims are also believed to define separately-patentable subject matter over Sakamoto, Ramchandran and Saito as described below.

With regard to claims 5 and 19, these claims specify the multiple bitstreams correspond to subbands of at least first and second digital sidebands of a host carrier signal in IBOC digital audio broadcasting system. The Examiner relies on the teachings in column 7, lines 60-65, of Saito. However, the relied-upon portion simply mentions various broadcasting methods generally. It fails to indicate that multiple bitstreams as claimed correspond to subbands of at least first and second digital sidebands of a host carrier signal in an IBOC digital audio broadcasting system. The proposed combination of Sakamoto, Ramchandran and Saito therefore fails to meet the particular claim limitations at issue.

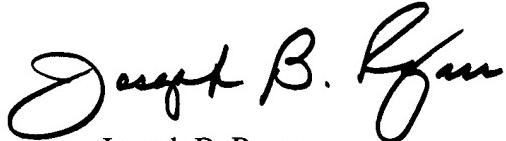
With regard to claims 8 and 22, these claims specify that audio information delivered to a receiver comprises a particular music selection. The Examiner relies on column 8, lines 10-11, of Saito. Applicant is unable to find any teaching whatsoever regarding a particular music selection in the relied-upon portion of Saito. The proposed combination of Sakamoto, Ramchandran and Saito therefore fails to meet the particular claim limitations at issue.

With regard to claims 9 and 23, these claims specify that the first quality level of the audio information corresponds to an FM-quality level, and a second quality level of the audio information corresponds to a CD-quality level. The Examiner acknowledges that the proposed combination fails to meet these limitations, but argues that such limitations would be obvious “because it would allow the user to hear the lower quality information without decrypting the higher level CD data” (Final Office Action, page 11, first paragraph). Applicant submits that this is a conclusory statement of obviousness, and insufficient to support modification of the combined teachings of the references. The proposed combination of Sakamoto, Ramchandran and Saito therefore fails to meet the particular claim limitations at issue.

With regard to claims 36 and 38, these claims call for a web site from which a decryption key is downloaded to an information processing device. The Examiner relies on column 1, lines 35-50, of Saito, but there is no mention in the relied-upon portion regarding the downloading of a decryption key from a web site. The proposed combination of Sakamoto, Ramchandran and Saito therefore fails to meet the particular claim limitations at issue.

In view of the above, Applicant believes that claims 1-38 are in condition for allowance, and respectfully requests the withdrawal of the §103(a) rejections.

Respectfully submitted,



Date: August 10, 2004

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APPENDIX

1. A method of delivering information, the method comprising the step of:
 - delivering at least a portion of the information to a receiver in an at least partially-encrypted format using multiple bitstreams of a digital communication system, such that access to the information is provided at a first quality level;
 - wherein the multiple bitstreams are transmitted in subbands of one or more digital sidebands of a carrier signal in the system; and
 - wherein upon decryption of the at least partially-encrypted format, access to the information is provided at another quality level.
2. The method of claim 1 wherein access to the information is provided at the first quality level without decrypting the information in the at least partially-encrypted format.
3. The method of claim 1 further including the step of providing a key for decrypting the information in the at least partially-encrypted format, such that when the information is decrypted, access to the information is provided at a second quality level higher than the first quality level.
4. The method of claim 3 wherein the key for decrypting the information in the at least partially-encrypted format is supplied over a network connection established with a server.

5. The method of claim 1 wherein the multiple bitstreams correspond to subbands of at least first and second digital sidebands of a host carrier signal in an in-band on-channel (IBOC) digital audio broadcasting system.

6. The method of claim 5 wherein the host carrier signal is an analog FM host signal.

7. The method of claim 1 wherein the information delivered to the receiver comprises audio information.

8. The method of claim 7 wherein the audio information comprises a particular music selection.

9. The method of claim 7 wherein the first quality level of the audio information corresponds to an FM-quality level, and a second quality level of the audio information corresponds to a CD-quality level.

10. The method of claim 1 wherein at least a subset of the multiple bitstreams are unencrypted, and the information at the first quality level is generated using only the unencrypted bitstreams.

11. The method of claim 1 further including the step of storing the information in the at least partially-encrypted format in a storage device accessible to the receiver.

12. The method of claim 11 wherein the storage device comprises at least one of a disk, a memory card and a cartridge.

13. The method of claim 11 wherein the storage device is associated with an information processing device which establishes a network connection with a server.

14. The method of claim 11 wherein the storage device is adaptable for insertion into (i) a corresponding receptacle of the receiver, and (ii) a corresponding receptacle of an information processing device which establishes a network connection with a server for obtaining a decryption key for decrypting the information in the at least partially-encrypted format.

15. An apparatus for delivering information, comprising:

a transmitter operative to transmit at least a portion of the information to a receiver in an at least partially-encrypted format using multiple bitstreams of a digital communication system, such that access to the information is provided at a first quality level;

wherein the multiple bitstreams are transmitted in subbands of one or more digital sidebands of a carrier signal in the system; and

wherein upon decryption of the at least partially-encrypted format, access to the information is provided at another quality level.

16. The apparatus of claim 15 wherein access to the information is provided at the first quality level without decrypting the information in the at least partially-encrypted format.

17. The apparatus of claim 15 wherein a key is provided for decrypting the information in the at least partially-encrypted format, such that when the information is decrypted, access to the information is provided at a second quality level higher than the first quality level.

18. The apparatus of claim 17 wherein the key for decrypting the at least partially-encrypted format is supplied over a network connection established with a server.

19. The apparatus of claim 15 wherein the multiple bitstreams correspond to subbands of at least first and second digital sidebands of a host carrier signal in an in-band on-channel (IBOC) digital audio broadcasting system.

20. The apparatus of claim 19 wherein the host carrier signal is an analog FM host signal.

21. The apparatus of claim 15 wherein the information delivered to the receiver comprises audio information.

22. The apparatus of claim 21 wherein the audio information comprises a particular music selection.

23. The apparatus of claim 21 wherein the first quality level of the audio information corresponds to an FM-quality level, and a second quality level of the audio information corresponds to a CD-quality level.

24. The apparatus of claim 15 wherein at least a subset of the multiple bitstreams are unencrypted, and the information at the first quality level is generated using only the unencrypted bitstreams.

25. The apparatus of claim 15 wherein the information in the at least partially-encrypted format is stored in a storage device accessible to the receiver.

26. The apparatus of claim 25 wherein the storage device comprises at least one of a disk, a memory card and a cartridge.

27. The apparatus of claim 25 wherein the storage device is associated with an information processing device which establishes a network connection with a server.

28. The apparatus of claim 25 wherein the storage device is adaptable for insertion into (i) a corresponding receptacle of the receiver, and (ii) a corresponding receptacle of an information processing device which establishes a network connection with a server for obtaining a decryption key for decrypting the information in the at least partially-encrypted format.

29. A method of receiving information, the method comprising the steps of:
receiving at least a portion of the information from a transmitter in an at least partially-encrypted format using multiple bitstreams of a digital communication system, such that access to the information is provided at a first quality level;

wherein the multiple bitstreams are transmitted in subbands of one or more digital sidebands of a carrier signal in the system; and

wherein upon decryption of the at least partially-encrypted format, access to the information is provided at another quality level.

30. The method of claim 29 wherein access to the information is provided at the first quality level without decrypting the information in the at least partially-encrypted format, the method further including the step of providing a key for decrypting the information in the at least partially-encrypted format, such that when the information is decrypted, access to the information is provided at a second quality level higher than the first quality level.

31. An apparatus for receiving information, comprising:

a receiver operative to receive at least a portion of the information from a transmitter in an at least partially-encrypted format using multiple bitstreams of a digital communication system, such that access to the information is provided at a first quality level;

wherein the multiple bitstreams are transmitted in subbands of one or more digital sidebands of a carrier signal in the system; and

wherein upon decryption of the at least partially-encrypted format, access to the information is provided at another quality level.

32. The apparatus of claim 31 wherein access to the information is provided at the first quality level without decrypting the information in the at least partially-encrypted format, and further

wherein a key is provided for decrypting the information in the at least partially-encrypted format, such that when the information is decrypted, access to the information is provided at a second quality level higher than the first quality level.

33. A method of delivering information, the method comprising the step of:

delivering at least a portion of the information to a receiver, using at least first and second bitstreams of a digital communication system, wherein the first bitstream is encrypted and the second bitstream is unencrypted, such that access to the information is provided at a first quality level;

wherein the first and second bitstreams are transmitted in subbands of one or more digital sidebands of a carrier signal in the system; and

wherein upon decryption of the first bitstream, access to the information is provided at another quality level.

34. An apparatus for delivering information, comprising:

a transmitter operative to transmit at least a portion of the information to a receiver, using at least first and second bitstreams of a digital communication system, wherein the first bitstream is encrypted and the second bitstream is unencrypted, such that access to the information is provided at a first quality level;

wherein the first and second bitstreams are transmitted in subbands of one or more digital sidebands of a carrier signal in the system; and

wherein upon decryption of the first bitstream, access to the information is provided at another quality level.

35. A method of delivering information, the method comprising the steps of:

delivering at least a portion of the information to a receiver in an at least partially-encrypted format using multiple bitstreams of a digital communication system, such that access to the information is provided at a first quality level without decrypting the information in the at least partially-encrypted format; and

providing via an electronic commerce system a key for decrypting the information in the at least partially-encrypted format, such that when the information is decrypted, access to the information is provided at a second quality level higher than the first quality level;

wherein the multiple bitstreams are transmitted in subbands of one or more digital sidebands of a carrier signal in the system.

36. The method of claim 35 wherein the electronic commerce system comprises a web site from which the key is downloaded to an information processing device.

37. An apparatus for delivering information, comprising:

a transmitter operative to transmit at least a portion of the information to a receiver in an at least partially-encrypted format using multiple bitstreams of a digital communication system, such that access to the information is provided at a first quality level without decrypting the information in the at least partially-encrypted format, and wherein a key for decrypting the

information in the at least partially-encrypted format is provided via an electronic commerce system, such that when the information is decrypted, access to the information is provided at a second quality level higher than the first quality level;

wherein the multiple bitstreams are transmitted in subbands of one or more digital sidebands of a carrier signal in the system.

38. The apparatus of claim 37 wherein the electronic commerce system comprises a web site from which the key is downloaded to an information processing device.